B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL

POST MID TERM- EXAM (2026)
MATHEMATICS

Class : VIII **Duration: 1 Hr**
Date : 10-01-2026 **Max. Marks: 25**
Admission No.: **Roll No.:**

General Instructions:

1. All Questions are compulsory.
2. There are 13 questions.

I. **CHOOSE THE CORRECT ALTERNATIVE IN THE FOLLOWING.** **5**

1. The factorisation of $12a^2b+15ab^2$ is

a) 3ab (4ab+5) b) 3ab (4a+5b) c) 3a (4a+5b) d) 3b (4a + 5b)

2. $5(2x + 1)(3x + 5) \div (2x + 1)$ is equal to

a) $5(3x + 5)$ b) $(3x + 5)$ c) 5 d) none of these

3. Volume of a cylinder with base radius = r and height = h, is:

a) $2\pi rh$ b) πr^2h c) $2\pi r(r + h)$ d) $\frac{1}{3}\pi r^2h$

4. The area of a rhombus whose diagonals are of lengths 10 cm and 8.2 cm is:

a) $41cm^2$ b) $82\ cm^2$ c) $410\ cm^2$ d) $820\ cm^2$

5. The height of a cuboid whose volume is $275\ cm^3$ and base area is $25\ cm^2$ is:

a) 10 cm b) 11 cm c)12 cm d) 13 cm

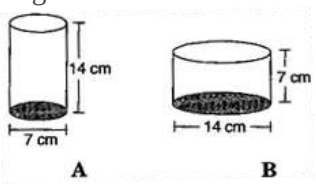
6. Factorise: $25\ m^2 + 30\ m + 9$ **2**

7. Work out the following division: **2**
   a) $10\ y\ (6\ y + 21) \div 5\ (2y + 7)$
   b) $(10\ x - 25) \div (2\ x - 5)$

8. Find the area of the Trapezium whose parallel sides are 20 m and 30 m and the distance between them is 12 m. **2**

9. A closed cylindrical tank of radius 7 m and height 3 m is made from a sheet of metal. How much sheet of metal is required? **2**

10. Diameter of cylinder A is 7 cm and the height is 14 cm. Diameter of cylinder B is 14 cm and height is 7cm.Check which cylinder is with greater volume. **3**



11. The diameter of a garden roller is 1.4 m and its length is 2 m long. How much area will it cover in 5 revolution? **3**

12. Factorise and divide: $(y^2 + 7y + 10) \div (y + 5)$ **3**

13. Factorise: a) $49x^2 - 36$ **3**
b) $x^2 + 6x + 8$

******** ALL THE BEST *********